

**Notice of Allowability**

Application No.

10/802,911

Applicant(s)

IWAMOTO, KAZUYA

Examiner

Julian Mercado

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4-13-07.
2. ☒ The allowed claim(s) is/are 1-3.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☒ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 20070709.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### ***Remarks***

This Office action is responsive to applicant's amendment filed April 13, 2007.

Claims 1-3 are pending.

### ***Drawings***

Figures 9-15 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

The rejection of claims 1-3 under 35 U.S.C. 103(a) based on Higuchi et al. (JP 2000-195482) has been withdrawn.<sup>1</sup>

In withdrawing this ground of rejection, the examiner concedes with applicant's assertion that "there are no strip-shaped plain portions arranged along diagonal lines of the rectangular group in Higuchi et al." (remarks on page 3) The claimed "diagonal line" is understood as a line

Art Unit: 1745

which connects two non-adjacent vertices of a polygon, such as the claimed “rectangular group”. While Higuchi et al.’s electrode group is clearly a polygonal shape, upon further consideration the matter [5] in Higuchi et al. are not disposed along the vertices or corners thereof, as shown in Figure 1, but instead are disposed in parallel to and connecting the lateral sides.

***Allowable Subject Matter***

Claims 1-3 are allowed.

The following is an examiner’s statement of reasons for allowance: the prior art of record does not teach or suggest the instant invention regarding a rectangular cell group having strip-shaped plain portions arranged along 2 diagonal lines of the rectangle.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Pat. 6,582,845 B2 to Helfinstine et al. teaches rectangular electrolyte sheets having multidirectional patterns, one of which teaches or at least suggests diagonal lines. See Figure 4c and col. 4 lines 32-42. The patentees further disclose that this pattern “impart[s] essentially no enhanced strain tolerance to the sheets in directions parallel to those span lines.” (ib.) JP 10-64514 to Noda et al. teaches an electrode group in which the gap [11] can be filled with an electrolyte, such as a solid electrolyte, in polygonal shapes such as a triangle, square or hexagon. See par. [0013]. Assuming *arguendo* that the solid electrolyte in Noda et al. would resultantly be disposed along a diagonal, the reference does not teach a solid electrolyte *and* strip-shaped plain portions as presently and separately called for in the claims.

---

<sup>1</sup> Claims 1-3 were discussed in the body of the rejection; a formal of rejection of claim 2 was inadvertently omitted in the statement of statutory grounds for rejection, although applicant has addressed the rejection for claims 1-3.

Art Unit: 1745

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

A handwritten signature in black ink, appearing to be "J. Mercado", with the letters "jam" written below it.A handwritten signature in black ink, appearing to be "Patrick J. Ryan".  
**PATRICK JOSEPH RYAN**  
**SUPERVISORY PATENT EXAMINER**